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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of) Examiner Janelle Combs Morillo
Venema et al)
Serial No. 10/706,846) Group Art Unit 1742
Confirmation No. 6084)
Filed 11/12/2003) Atty. Docket # 4430-031234 (03-1257)
For METHOD OF MANUFACTURING)
A NEAR-NET SHAPE ALLOY)
PRODUCT) December 21 , 2005

Rule 1.131 Declaration

I, Jeffrey J. Witters, an employee of ALCOA, declare and state:

- (1) The invention described in the above referenced patent application was invented by myself and other ALCOA personnel prior to February 13, 2003.
- (2) United States Patent Application 2004/0182483 by Heymes et al, was cited against the present application in an Office Action dated August 25, 2005.
- (3) The priority date for the Heymes application is based on the United States Provisional Patent Application having serial number 60/446,993 filed on February 13, 2003.

(4) I have reviewed a proposal dated January 7, 2003 that to the best of my knowledge, information and belief was sent by ALCOA to the Puget Sound Wing Group at Boeing Aircraft Corporation on or before January 9, 2003.

(5) The proposal to the Puget Sound Wing Group at Boeing Aircraft Corporation is a rough order of magnitude quotation for a machined panel and is identified as confidential information.

(6) One line in the proposal states: "Plate produced in F-temper prior to machining. Machined panel brought to DVPT for SHT+Q+STR+AGE to T7651".

(7) The following definitions in the line quoted above in Paragraph (6) are understood by ALCOA and Boeing personnel interacting on the proposal:

DVPT refers to the ALCOA plant at Davenport, Ohio.

SHT means to solution heat treat.

Q means to quench.

STR means to stretch

AGE refers to artificial ageing

T7651 is a specific temper

(8) ALCOA and Boeing personnel understood that the alloy was the Aluminum Association 7085 alloy. (Previous communication between ALCOA and Boeing had established that the code LW-P3, which appears in the proposal, referred to AA 7085.)

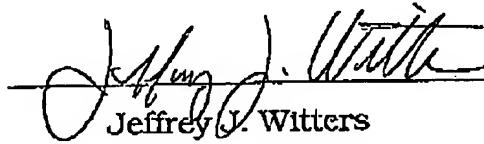
(9) The steps set forth in the quoted section in Paragraph 6 above read directly on Claims 1-8 of the subject application, provided that it is understood that the plate was obtained from an ingot by rolling.

(10) It is my belief that both Boeing personnel and Alcoa personnel understood that the plate would be obtained from an ingot by rolling.

(11) I have reviewed an E-mail dated which, to the best of my knowledge, information and belief, was sent by Michael B. Giuffre (Boeing) to Dan Goodyear (ALCOA) on February 6, 2003. The E-mail indicates that Boeing received the ALCOA quotation, reviewed it and responded prior to February 13, 2003. The E-mail includes six pages of dimensioned sketches that, to the best of my knowledge, information and belief, are proprietary to Boeing.

Declarant further declares and states that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,



Jeffrey J. Witters

2005 DEC 21
Date

**Boeing Yellowstone - 777 Lower Wing
Alcoa Rough Order of Magnitude (ROM) Quotation**

Option	Panel No.	Protect	Allow-Temp:	Panel Configuration (see attachments)	Width (in)	Length (in)	No. Shippers X Dimension Panel Weight (lb)	Risk (L,M,H)	Potential Price (\$/lb)	Piece Price (\$)	Price per SS (\$)
Option 1b: Plate produced in F-Temper prior to machining. Machined Panel brought to DVPT for SHT-Q+STR+AGE to T7651.											
1b	1	Plate	LW-PJ	B	71	1122	10	M	\$6.00	\$88,269	
1b	2	Plate	LW-P3	B	72	1159	10	M	\$5.75	\$88,458	
1b	3	Plate	LW-P3	B	71	865	10	M	\$7.13	\$80,867	
								Totals =>		\$287,584	\$515,188
Option 2a: Extrusions produced @ LAF only.											
2a	1	Extrusion	LW-E3	A	24	263	3	L	\$7.25	\$6,564	
2a	2	Extrusion	LW-E3	A	26	689	3	L	\$7.25	\$16,878	
2a	3	Extrusion	LW-E3	A	30	1128	4	L	\$7.75	\$32,850	
2a	4	Extrusion	LW-E3	A	30	1142	4	L	\$7.75	\$33,258	
2a	5	Extrusion	LW-E3	A	30	1116	4	L	\$7.75	\$32,510	
2a	6	Extrusion	LW-E3	A	26	883	3	L	\$7.25	\$23,038	
2a	7	Extrusion	LW-E3	A	25	653	3	L	\$7.00	\$16,088	
2a	8	Extrusion	LW-E3	A	25	611	3	L	\$7.00	\$12,452	
								Totals =>		\$174,455	\$348,910

Notes:

- 1) The estimated prices provided above are not part of an existing contract between Alcoa and the recipient for the sale of Alcoa alloy products. The provision of these estimates to the recipient does not constitute an offer by Alcoa to sell the Alcoa alloy products to recipient, nor will any attempt by recipient to accept such estimates, for the specified Alcoa alloy products create a contractual relationship between Alcoa and the recipient or the sale and purchase of such products. The estimated prices are provided to the recipient by Alcoa solely for the purposes of facilitating trade study estimates and rough product comparisons as part of the recipients planning activities. Alcoa makes no representations or warranties concerning the suitability for any use or the availability of the Alcoa alloy products. These estimates are subject to changes in design and alloy development and are better established.
- 2) Potential Price (\$/lb) dependent upon achieving desired future cost reductions and volume/market objectives.
- 3) Special Testing, Excess Transportation and Packaging not included.
- 4) All Pricing Assumes 2003 Deliveries.
- 5) All Estimates are valid for 30 days from 2600 JAN 07
- 6) Estimates are valid for 30 days from 2600 JAN 07

Alcoa Proprietary Backgound Information (Level 5)

Venema, et al.

USSN 10/706,846

Filed: November 12, 2003

**Boeing Yellowstone - 777 Upper Wing
Alcoa Rough Order of Magnitude (ROM) Quotation**

Option	Panel No.	Product	Altov-Temcoer Config.	Width (in)	Length (in)	No. Slices/Panel	X Dimension (in)	Panel Weight (lb)	Potential Price (\$/lb)	Piece Price (\$)	Price per SS (\$)
Panel											
1	1	Plate	7055-T7751 B	71	1122	10	2.85	14,712	M	5.98	\$87,975
1	2	Plate	7055-T7751 B	72	1159	10	3.35	15,304	M	5.58	\$85,397
1	3	Plate	7055-T7751 B	71	865	10	2.85	11,342	M	6.47	\$73,381
Totals =>											\$246,754
Panel 2a: Extrusions produced @ LAF only.											
2a	1	Extrusion	7055-T7751 A	24	268	3	3.85	905	L	57.25	\$5,564
2a	2	Extrusion	7055-T7751 A	24	669	3	3.85	2,328	L	57.25	\$16,876
2a	3	Extrusion	7055-T7751 A	30	1128	4	3.35	4,868	L	56.75	\$32,860
2a	4	Extrusion	7055-T7751 A	30	1442	4	3.35	4,929	L	56.75	\$33,268
2a	5	Extrusion	7055-T7751 A	30	1116	4	3.35	4,818	L	56.75	\$32,510
2a	6	Extrusion	7055-T7751 A	26	889	3	4.85	3,177	L	57.25	\$23,036
2a	7	Extrusion	7055-T7751 A	25	693	3	4.35	2,413	L	57.00	\$16,888
2a	8	Extrusion	7055-T7751 A	25	511	3	4.35	1,779	L	57.00	\$12,453
Totals =>											\$174,455

Notes:

- 1) The estimated prices provided above are not part of an existing contract between Alcoa and the recipient for the sale of Alcoa alloy products. The provision of these estimates to the recipient does not constitute an offer by Alcoa to sell the Alcoa alloy products to recipient, nor will any attempt by recipient to accept such estimates for the specified Alcoa alloy products create a contractual relationship between Alcoa and the recipient or the sale and purchase of such products. The estimated prices are provided to the recipient by Alcoa solely for the purposes of facilitating trade study estimates and rough product comparisons as part of the recipients planning activities. Alcoa makes no representations or warranties concerning the availability or any use or the availability of the Alcoa alloy products. These estimates are subject to changes the design and alloy development are better established.
- 2) *Potential Price (\$/lb) dependent upon achieving desired future cost reductions and volume/share objectives.
- 3) Special Tooling, Excess Transportation and Packaging not included.
- 4) All Pricing is ROM (Rough Order of Magnitude).
- 5) All Pricing Assumes 2003 Deliveries.
- 6) Estimates are valid for 30 days from 2003 JAN 07

Alcoa Proprietary Background Information (Level 5)

Venema, et al.

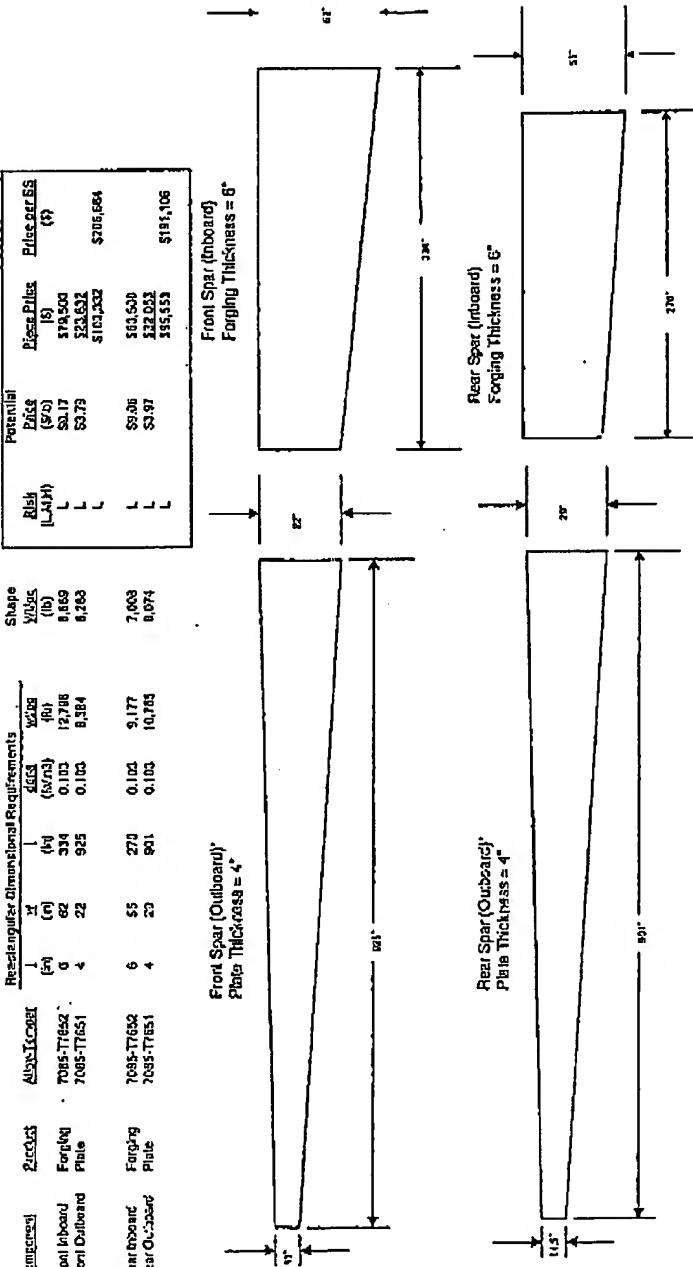
USSN 10/706,846

Filed: November 12, 2003

Boeing Yellowstone - 777 Wing Spar
Alcoa Rough Order of Magnitude (ROM) Quotation

Category	Part#	Alcoa Part#	Relevant Dimensions Requirements
Front Inboard	Forging	7085-71502	6 62 0.034 0.103 12.706 0.103 8.384
Front Outboard	Forging	7085-7151	4 22 925 0.103 6.183
Rear Inboard	Forging	7085-71502	6 55 270 0.102 9.177 0.074 7.003
Rear Outboard	Forging	7085-7151	4 23 901 0.103 10.705 0.074 8.074

Potential	Length	Width	Plate per SS
Front Spar (Inboard)	14.4 ft	5.02	179.500
Front Spar (Outboard)	14.4 ft	5.17	521.632
Rear Spar (Inboard)	14.4 ft	5.73	513.352
Rear Spar (Outboard)	14.4 ft	5.84	520.564



Note: Front and Rear Inboard Spans will be quoted in Imperial units by Alcoa

Alcoa

Notes:
1) The information provided above are relevant to an existing contract between Alcoa and the recipient. In the sale of Alcoa alloy products to the recipient does not constitute an offer by Alcoa to sell the Alcoa alloy products to recipient, nor will any obligation be accepted to supply such products. The Alcoa alloy products are provided to the recipient by Alcoa solely for the purposes of trial, testing, research and development of the recipient's plant facilities. Alcoa makes no representations or warranties concerning the suitability for any use or performance of the Alcoa alloy products. These conditions are subject to changes in design and delivery schedule and take effect.

2) Estimated Total, Freight, Transportation and Packaging not included.

3) All Alcoa in Alcoa (Zinc) Co., Inc. of Germany.

4) All delivery, insurance and shipping costs are FOB destination.

5) All delivery, insurance and shipping costs are FOB destination.

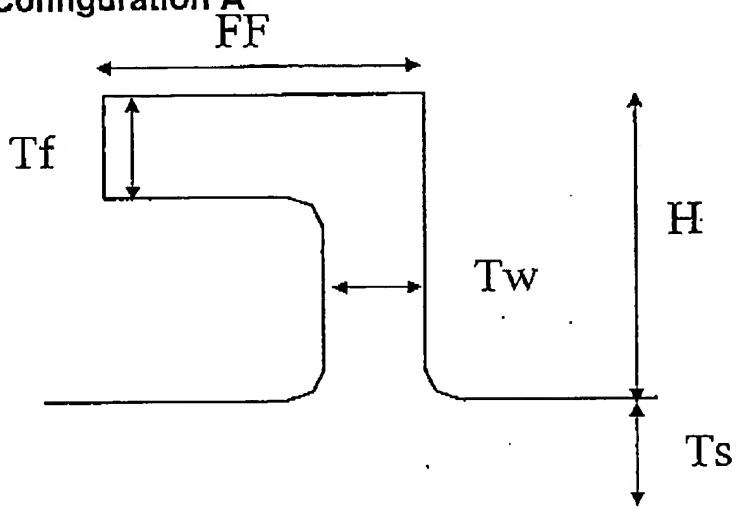
6) Estimate is valid for 30 days from 2003 May 07.

7) Forging Potential Price includes US and restricted countries for delivery control.

Alcoa Proprietary Data and Information (Level 5)

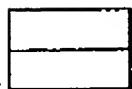
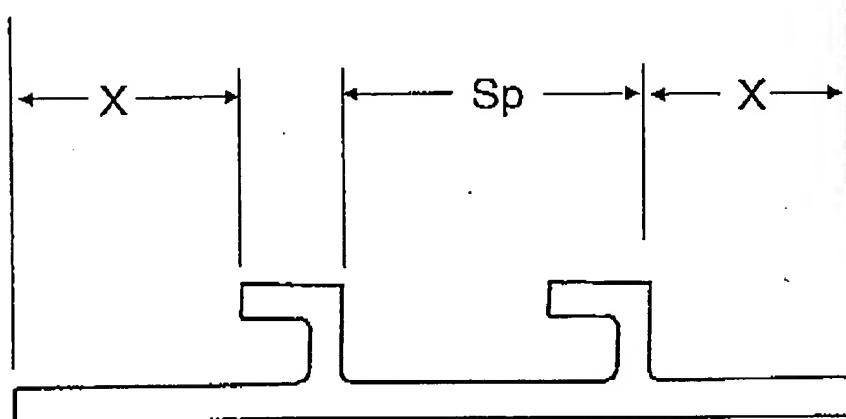
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Boeing Yellowstone - 777
Lower Wing Cover LW-E3
Plank Configuration A



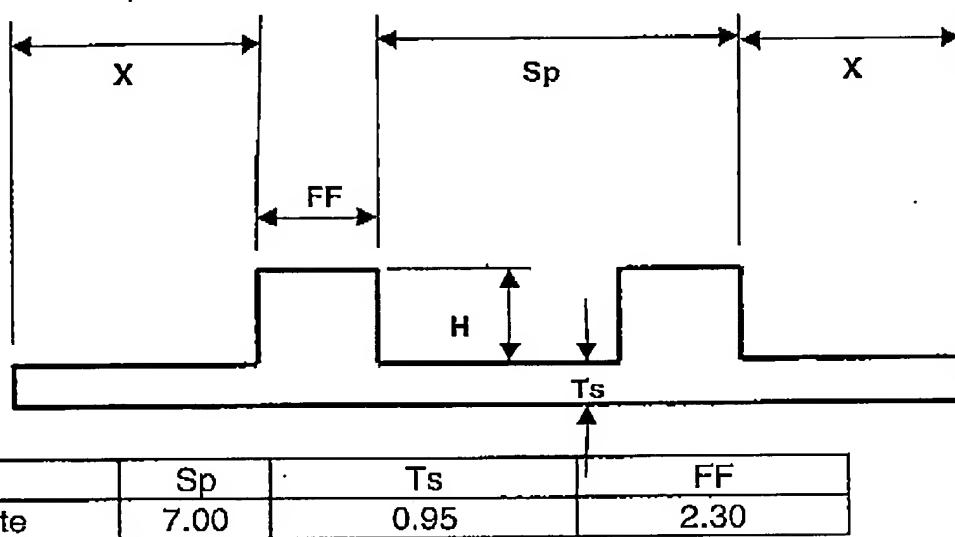
	Sp	Ts	Tw	Tf	FF	H
Extrusion	7.00	0.95	0.75	0.90	2.30	2.60

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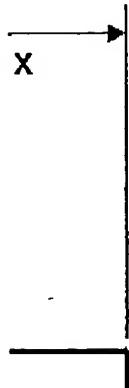


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Boeing Yellowstone - 777
Lower Wing Cover LW-E3
Plank Configuration B



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Boeing Yellowstone - 777 Lower Wing
Appendix 1 - Alternates Configurations

Option	Part No.	Product	Allowable Temp.	Panel						Basis (L/M/H)	Potential Price (\$/m)	Piece Price (\$/s)	Price per s.s. (\$/s)
				Configuration (see attachments)	Width (in)	Length (in)	No. Shims (in)	X Dimension (in)	Y Dimension (in)				
Option 1a: Plate produced in T7651 temper prior to machining.													
1a	1	Plate	LW-P3	B	53.5	767	7	4.6	7.323	L	\$6.23	\$45,625	
1a	2	Plate	LW-P3	B	53.5	1140	1	4.6	10.885	L	\$7.11	\$77,301	
1a	3	Plate	LW-P3	B	53.5	1124	7	4.6	10.732	L	\$7.12	\$75,412	
1a	4	Plate	LW-P3	D	53.5	714	7	4.6	6.017	L	\$8.52	\$14,049	
										Totals ^{a,b,c}		\$243,077	\$407,776
Option 2a: Extrusions produced @ LAF													
2a	1	Extrusion	LW-E3	A	32	457	4	4.05	2.042	M	\$6.50	\$13,601	
2a	2	Extrusion	LW-E3	A	47	1124	5	5.05	8.440	M	\$6.50	\$51,812	
2a	3	Extrusion	LW-E3	A	41	1143	5	5.35	6,658	M	\$6.50	\$45,730	
2a	4	Extrusion	LW-E3	A	21	1066	4	4.05	4,917	M	\$6.75	\$33,101	
2a	5	Extrusion	LW-E3	A	33	617	4	4.05	3,762	M	\$6.75	\$26,800	
2a	6	Extrusion	LW-E3	A	35	598	5	2.35	8,090	M	\$6.50	\$70,000	
										Totals ^{a,b,c}	M	\$232,452	\$405,103
Option 3a: Plate-Extrusion Combination. All rectangular plate produced in T7651 temper prior to machining.													
3a	1	Extrusion	LW-E3	A	26	355	3	4.85	1,268	L	\$7.25	\$59,199	
3a	2	Plate	LW-P3	B	54	1126	7	4.05	10,099	L	\$7.11	\$76,053	
3a	3	Plate	LW-P3	B	54	1122	7	4.85	11,050	L	\$7.11	\$70,620	
3a	4	Plate	LW-P3	B	54	923	7	4.05	8,650	L	\$5.07	\$52,807	
3a	5	Extrusion	LW-E3	A	26	511	3	4.85	1,826	L	\$7.25	\$13,241	
										Totals ^{a,b,c}	L	\$210,817	\$451,535
Option 3b: Plate-Extrusion Combination. All rectangular plate produced in F-temper prior to machining.													
Matched Panel brought to DVT for SH7+Q-STR+AGE to T7651.													
3b	1	Extrusion	LW-E3	A	35	479	5	2.35	2,487	M	\$8.75	\$10,651	
3b	2	Plate	LW-P3	B	72	1133	10	3.25	16,040	M	\$6.78	\$86,031	
3b	3	Plate	LW-P3	B	72	1133	10	3.25	15,040	M	\$5.78	\$86,031	
3b	4	Extrusion	LW-E3	A	35	374	5	2.35	2,958	M	\$8.73	\$19,514	
										Totals ^{a,b,c}	M	\$210,018	\$420,936

Notes:

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2) "Furnished Price (SLP)" depends upon sufficient desired future cost reductions and volume/share objectives.

3) All Pricing is FOB Chicago Order of May market.

4) All Pricing Assumes 2003 Deliveries.

5) Estimates are valid for 30 days from 2003 JAN 07.

Alcoa Proprietary Background Information (Level 5)

**Boeing Yellowstone - 777 Upper Wing
Appendix 2 - Alternate Configurations**

Option	Panel No.	Product	Altay-Temper	Panel	Width (in)	Length (in)	No. Shelves	X-Dimension (in)	Panel Weight (lb)	Potential Price (\$/lb)	Piece Price (\$)	Price per SS (\$)
Option 2b: Extrusions produced @ LAF and Russia												
2b 1	Extrusion	7055-T7751	A	32	457	4	4.35	2,062	M	\$6.50	\$13.40	
2b 2	Extrusion	7055-T7751	A	41	1124	5	6.35	6,449	H	\$8.50	\$54.812	
2b 3	Extrusion	7055-T7751	A	41	1143	5	5.35	6,588	H	\$8.50	\$55.739	
2b 4	Extrusion	7055-T7751	A	33	1068	4	4.85	4,917	M	\$6.75	\$53.191	
2b 5	Extrusion	7055-T7751	A	33	817	4	4.85	3,762	M	\$6.75	\$25.390	
2b 6	Extrusion	7055-T7751	A	35	595	5	2.35	3,000	Totals => M	\$6.50	\$20.018	
										\$202,552	\$405,103	

Option 3: Plate-Extrusion Combination. All rectangular plate produced in F-Temper prior to machining.

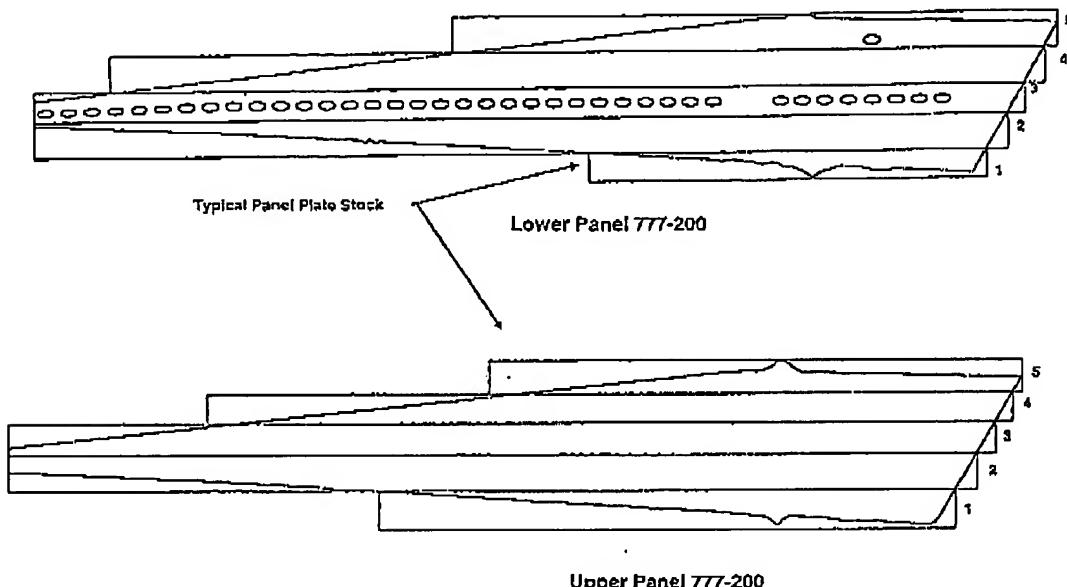
3	Machined Panel brought to DVT for SHTR+Q+STR+AGE to T7751.											
3 1	Extrusion	7055-T7751	A	35	479	5	2.35	2,467	M	\$6.75	\$16.651	
3 2	Plate	7055-T7751	B	72	1139	10	3.35	15,040	M	\$5.50	\$83.923	
3 3	Plate	7055-T7751	B	72	1139	10	3.35	15,040	M	\$5.50	\$83.923	
3 4	Extrusion	7055-T7751	A	35	574	5	2.35	2,958	Totals => M	\$6.75	\$18.954	
										\$204,452	\$408,904	

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Boeing 777 Upper and Lower Wing Skin (Plan View)
Example of panel numbering convention



Skins - Raw Stock Weights (Rev A)

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